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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,554	04/12/2004	Gordon Molnar	P68.2B-11533-US01	1810
490	7590	06/28/2006	EXAMINER	
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			KRUER, STEFAN	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/822,554		MOLNAR ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Stefan Krueer		3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3 - 10, 12, 14 - 21 and 23 - 47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3 - 9, 17 - 19, 21, 23 - 24, 28 - 45 is/are rejected.
- 7) ☒ Claim(s) 10, 12, 14 - 16, 20, 25 - 27, and 46 - 47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

**Claims 3, 10 and 12** are objected to for being dependent upon cancelled claims. The claims will be prosecuted as being dependent upon Claims 1 and 10, respectively.

**Claims 45 and 46** are objected to for failing to be amended consistent with the amendment of Claim 1, whereby "central seat support post" is replaced by "seat support".

**Claims 21, 31 and 32** are objected to for failing to address the amendments of Claim 1, whereby "worm" is replaced by "spiral plastic drive", and "offset arm" is replaced by "seat support", respectively.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 17** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 3 - 4, 17 - 19, 21, 23, 28 - 29, 30 - 42 and 45** are rejected under 35 U.S.C. 102(a) as being anticipated by Voves et al (4,913,264) in view of Bartlet (5,230,405) and in further view of Gauger et al (5,316,258).

**Re: Claim 1**, Voves et al disclose:

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- a rail, said rail having a track portion (“...plurality of teeth (not shown) formed along the backside of the rail 12”) (Col. 4, Line 16),
- a carriage (18) mountable to a rail (12) with a track engaging spiral drive (pinion, not shown, Col. 4, Line 15),
- a motor (not shown, Col. 4, Line 15) to power said drive gear,
- a seat support (64) being mountable on said carriage in one of a left side or a right side position,
- a seat (22) pivotally mounted on said seat support on a laterally offset pivot axis (50),
- and a means for angularly securing said seat in position on said seat support in a right (Fig. 3) side position as well as selectively releasing said seat to permit the seat to swivel (106) about said laterally offset pivot axis between an upward facing position and a sideways facing position on said seat support;

however, Voves et al are silent regarding the material of construction of their drive gear and track, as well as the orientation of the mounting of their track in relation to his rail.

Attention is directed to Bartlet who, though he teaches his track and rail as metallic in material (Col. 3, Line 31), teaches his track (130) mountable on an upper structural portion of his rail (114).

Gauger et al teach further their primary drive components, including their track (148) and spiral drive gear (152), as “...preferably formed of high strength plastic...” whereby their track is mounted on the upper structural portion of their rail (50).

It would have been obvious to one of ordinary skill in the art to modify the invention of Voves et al with the teaching of Bartlet as furthered by Gauger et al to provide a spiral drive gear and track of high strength plastic, for the benefit of lightweight and economics of scale in manufacturing, as well as the use of gravity to ensure proper engagement of the drive gear and track with any load-offsetting needs accommodated by the raised rail structure, i.e. for reduction in backlash/pressure.

**Re: Claim 3**, though Voves et al disclose a structural portion as a hollow section having side channels (12), they are silent regarding carriage wheels or support rollers that ride in said channels.

Attention is directed to Bartlet who teaches his side channels (124, 126) and wheels (154) that ride in channels of his rail means (114). Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Voves with the teaching of Bartlet in order to provide a conventional, rotatable support means to the carriage of Voves.

**Re: Claim 4**, again, though Voves et al are silent regarding carriage wheels or support rollers, and Bartlet is silent regarding bearings of his wheels, he notes that they "...are mounted by conventional means..." Therefore, it would have been obvious to one of ordinary skill in the art to provide the rollers of Bartlet with bearings adjacent to his wheels in order to provide a smoother, durable operating system for purpose of performance and marketability.

**Re: Claim 17**, to the extent that the claim is understood, the references would inherently meet the language of the claim.

**Re: Claims 18 – 19 and 45**, Voves et al disclose their seat support post (62) as a pivotal shaft, whereby the seat is pivotable about its vertical axis to assist the user in entering and exiting the chair.

Bartlet teaches further his seat support post (200) that is pivotally mounted at a pivot point (210) to his carriage (Fig.'s 3B and 3A). Furthermore, the seat support post (264, 262, 266) of Bartlet is attached to the seat support post, which includes a fastener (206, 208, 230, Fig. 3A) with which to lock the seat support post at an angle relative to the carriage. Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosure of Voves et al with the teachings of Bartlet to provide a carriage-and-chair assembly with the foresight for a variety of inclines common to residential and commercial stairways.

**Re: Claim 21**, though Voves et al and Bartlet disclose a pinion gear drive, the invention of Gauger et al disclose a spiral gear drive (152) for compact installations, wherein their motor drives their spiral gear in two directions to permit movement in opposite directions along their rail.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosures of Voves et al and Bartlet with the teaching of Gauger et al to provide a compact drive with motor to drive the spiral gear in opposite directions.

**Re: Claim 23**, Voves et al teach the incorporation and applicability of various control switches to control the motor, such as start/stop and direction of travel (Col. 10, Line 5), for purposes of ergonomics and safety.

**Re: Claim 28**, Voves et al disclose, "In order to minimize the extent to which the passenger seat 22 extends outwardly from the stairway wall 14 and still provide rotation of the seat 22... the seat swivel mechanism is so arranged so as to provide a substantially constant minimum clearance between the seat 22 and the stairway wall 14..." (Col. 5. Line 43).

**Re: Claim 29**, Voves et al disclose one offset mount (112, Fig. 3).

**Re: Claim 30**, Voves et al disclose two offset mounts (112, 114, Fig. 3) for said seat support, with at least one located at either side of said seat wherein said seat may mount in either a left hand or a right hand offset configuration (Fig. 4).

**Re: Claim 31**, Voves et al disclose a means for angularly securing his seat in position on said seat support comprising a notches (110, 112, 114) and a latch (108, Fig. 2), sized and shaped to engage the notches; however, the seat support and notched plate of Voves et al are one in the same.

Attention is directed to Bartlet who teaches his notched plate (246, Fig. 11) unique to his seat support (270), said plate having notches (282, Fig. 4B) and a latch (286, Fig. 4A) sized and shaped to engage said notches.

It would have been obvious to one of ordinary skill in the art to modify the invention of Voves et al with Bartlet to provide an alternative mounting means.

**Re: Claim 32**, Bartlet teaches his notched plate (64) is fixed to said seat support and said latch is mounted to said seat (Fig.'s 3 and 4).

**Re: Claim 33**, Bartlet teaches his latch as manually accessible 104, Fig. 2) from said seat (with which "...the passenger can rotate the... seat...toward one of the ... positions."

**Re: Claim 34**, Voves et al disclose the preference for "...additional switches, responsive to the rotational position of the chair... to inhibit chairlift operation when the chair 22 is rotated to a position other than the center position..." (Col. 10, Line 23).

**Re: Claim 35**, though Voves et al are silent regarding contact switches to disengage the motor in the presence of an obstruction along the travel of the carriage, Bartlet teaches a limit switch (105) that when touching a bumper (103) "...or other obstruction, motor 170 is prevented from moving the chairlift further in that direction..." (Col. 5, Line 32). Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosure of Voves with the teaching of Bartlet in order to provide a further measure of safety.

**Re: Claims 36 and 37**, though Voves et al are silent regarding the power source and recharging means, Bartlet teaches a housing (236) for a pair of batteries (250) and a pair of contacts (107) mounted on the bumpers (103) at both ends of the rail for contact with their mating contacts (107) mounted on the guides (148) of the carriage, to charge the batteries when the carriage is at either end of the rail. Therefore, it would have been obvious to one of ordinary skill in the art to provide the invention of Voves et al with the teaching of Bartlet in order to ensure power supply to the chairlift for disabled persons during emergencies such as power outages.

**Re: Claims 38 - 40**, again, Bartlet teaches a mount (103) with contacts (107) on either side of the rail (Fig. 7) as provision for the positive and negative terminals. Furthermore, the contacts are fixed and separated, thereby providing proper contact.

**Re: Claim 41**, Bartlet teaches mounts (103) housing the channels that are held in place by screws, thereby permit trimming of the rail without compromising access to said mount (Fig. 7).

**Re: Claim 42**, though Voves et al and Bartlet disclose their rails having a hollow configuration, they are silent regarding the material of construction and the ability to trim its length. Gauger et al teach, "...track 52 is in the form of an elongated... formed member which is stamped, extruded, or otherwise formed from a suitable material..." (Col. 6, Line 8), as well as the aforementioned preferable plastic materials of construction. Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Voves et al and Bartlet with the teachings of Gauger in order to produce a lightweight yet durable product of contemporary manufacturing means that can be modified as needed in the field.

**Claim 5** is rejected under 35 U.S.C. 102(a) as being anticipated by Voves et al and Bartlet (5,230,405), in view of Gauger et al, as applied to Claim 4, and in further view of Cheney (2,507,887).

Voves et al, Bartlet and Gauger et al are silent regarding their rail comprising two or more sections.

Attention is directed to Cheney who discloses, " the rail means ... may be formed of one or more sections..." (Col. 1, Line 50).

Therefore, it would have been obvious to one of ordinary skill in the art to provide the invention of Voves and Bartlet, as further by Gauger et al, with the teaching of Cheney in order to afford a practical means of installing the rail in residences, which is in keeping with the "DIY" intent of the instant invention.



**Claims 6 - 9** are rejected under 35 U.S.C. 102(a) as being anticipated by Voves et al, Bartlet and Gauger et al, in further view of Cheney, as applied to Claim 5, and in further view of Hoffman (2,888,099).

**Re: Claim 6**, though Voves et al, Bartlet, Gauger et al and Cheney are silent regarding a race for electrical wiring along the rail, Hoffman teaches "... a faceplate 45... which encloses the cable" (Col. 4, Line 10 and 20). Therefore, it would have been obvious to one of ordinary skill in the art to modify the inventions of Voves et al, Bartlet and Gauger et al, as furthered by Cheney, with the teaching of Hoffman, to provide a means to secure the cable from interfering with the travel of the carriage.

**Re: Claim 7**, though Voves et al, Bartlet, Gauger et al and Cheney are silent regarding the rail connectors, Hoffman teaches, "...the main rail may be ...in the preferred form, a plurality of sections ... joined in any suitable manner" (Col. 3, Line 75). Therefore, it would have been obvious to one of ordinary skill in the art to modify the inventions of Voves et al, Bartlet and Gauger et al, as furthered by Cheney, with the teaching of Hoffman, to facilitate the handling and installation of the rail.

**Re: Claim 8**, whereas Voves et al review the applicability of switches in general (Col. 5), Bartlett teaches the use of a channel (124/126) for retaining a switch trip element (103). **With respect to Claim 9**, Bartlet teaches the incorporation of switches (105) mounted via "... each guide (148)" on the carriage, which, when engaged, the "... motor 170 is prevented from moving the chairlift further in that direction". (Col. 5, Line 31). Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Voves et al with the teaching of Bartlet for safety and functionality.

**Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Voves et al and Bartlet, in further view of Gauger, as applied to Claim 23, and further in view of Dechantsreiter et al (3,830,379).

Though Voves et al and Bartlet teaches the applicability of various control switches for normal operation and safety, and Gauger et al is silent on switches in general, Voves et al and Bartlet are silent regarding the use of limit switches for slowing and stopping the chair upon reaching the ends of the rail. Dechantsreiter et al,

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however, teach the use of limit switches (17LS, 18LS, 19LS and 20LS, Fig. 2) as a means to "...to cause the carriage motor ... to automatically slow down and then stop as the carriage approaches the extreme limits of travel in either ... direction (sic)" (Col. 10, Line 53).

Though Dechantsreiter et al teach only one switch for slowing the carriage in each direction, it would have been obvious to one of ordinary skill in the art to modify the disclosure of Voves et al and Bartlet, in further view of Gauger, with the teaching of Dechantsreiter to insure a controlled deceleration and subsequent stop of a residential chair lift for disabled persons.

**Claims 43 and 44** is rejected under 35 U.S.C. 103(a) as being unpatentable over Voves et al and Bartlet, in further view of Gauger, as applied to Claim 42, and further in view of Schaffner et al (6,000,758).

**Re: Claim 43**, Whereas Voves et al is silent regarding the material of construction of his rail, Bartlet notes his rail can be welded and Guager et al disclose their rail of a suitable material "...such as a high-strength, low alloy steel..."

Attention is directed to Schaffner et al who teach a spiral gear drive using dissimilar materials for smooth operation whereby the gear is preferably of nylon and the rail is preferably steel or aluminum (Col. 2, Line 60). Therefore, it would have been obvious to one of ordinary skill in the art to modify the disclosures of Voves and Gauger with the teachings of Schaffner to provide a material that is dissimilar to that of the gear yet is common, light weight and durable as well as in keeping with DIY marketing.

**Re: Claim 44**, though Voves et al disclose a rail for a chairlift, Bartlet teaches multiple feet (110) to secure the rail to the stairway. Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Voves et al with the teaching of Bartlet in order to secure the chairlift system to the immediate structure.

***Allowable Subject Matter***

**Claims 10, 12, 14 – 16, 20, 25 - 27, and 46 - 47** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following claims contain allowable subject matter because the teachings of the prior art of record taken as a whole do not show or render obvious the combination set forth including:

**Claim 10** - track is slidably retained in said track retaining profile.

**Claim 20** - seat support post is in the form of a forked element below said pivot point.

**Claim 25** - manual motor switch to facilitate the installation on the track.

**Claim 26** – footrest which can be placed on said carriage

**Claim 46** - level is sized and shaped to fit on top of said seat post before said offset arm is attached.

**Claim 47** - a disposable ramp for installing the carriage

***Response to Arguments***

Applicant's arguments filed 12 May 2006 have been fully considered but they are not persuasive.

Gauger et al teach their worm and worm gear made of high strength plastic whereby the worm offers the same function and purpose as the track of the instant invention and is therefore a viable, functional alternative to said track. The threads of the worm are of a configuration to afford engagement with a gear drive as that of the teeth and gear drive of the instant invention. There are differences, particularly in the form of speed, of the two, familial technologies; however, such differences were neither reviewed nor claimed in the written specification of the instant invention.

Regarding the seat support on a laterally offset pivot axis and the ensuing amendments to overcome the rejection on the basis of Voves et al, the terminology of the arguments filed on the above filing date under Remarks reflect those of the amended claims and not those of the original claim language, on which the arguments should be directed.

Neither the original claim language nor the amended claim language overcame the rejections based on the prior art of record of the previous office action.

For instance, the concept of “a laterally offset pivot axis” is relative to a frame of reference for which the invention of Voves et al, and Bartlet for that matter, offer pivot axes offset from either the understood centerlines of their respective carriages. They both address the concern for optimizing clearances from their adjacent walls and assuring performance, while minimizing the interference of their respective rail and equipment onto the traffic area of the accompanying staircases.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M – F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHK

21 June 2006



KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600